

09/913538

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of :
Fuminori SATO et al. : Attn: BOX PCT
Serial No. NEW : Docket No. 2001_1141A
Filed August 15, 2001 :

HETEROCYCLIC COMPOUNDS, INTERMEDIATES
THEREOF AND ELASTASE INHIBITORS
[Corresponding to PCT/JP00/01022
Filed February 23, 2000]

INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for Patents,
Washington, DC 20231

Sir:

Pursuant to the provisions of 37 CFR 1.56, 1.97 and 1.98, Applicants request consideration of ☒ the references listed on attached form PTO-1449 and/or ☐ the additional information identified below in paragraph 3. A legible copy of each reference listed on the form PTO-1449 and each U.S. patent application listed below is enclosed, except a copy is not provided for each reference previously cited by or submitted to the Patent Office in international application no. PCT/JP00/01022.

1a. ☒ This Information Disclosure Statement is submitted:

within three months of the filing date (or of entry into the National Stage) of the above-entitled application, or

before the mailing date of the first Office Action on the merits,

and thus no certification and/or fee is required.

ATTACHMENT C

- 1b. ☐ This Information Disclosure Statement is submitted

after the events of above paragraph 1a and prior to the mailing date of a final Office Action or a Notice of Allowance or an action which otherwise closes prosecution in the application, and thus:

- (1) ☐ the certification of paragraph 2 below is provided, **or**
(2) ☐ the fee of \$180.00 specified in 37 CFR 1.17(p) is enclosed.

- 1c. ☐ This Information Disclosure Statement is submitted:

after the mailing date of a final Office Action or Notice of Allowance or action which otherwise closes prosecution in the application, and prior to payment of the issue fee, and thus:

**the certification of paragraph 2 below is provided, and
the fee of \$180.00 specified in 37 CFR 1.17(p) is enclosed.**

2. It is hereby certified

- a. ☐ that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the Statement, or
b. ☐ that no item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of the person signing the certification after making reasonable inquiry, was known to any individual designated in §1.56(c) more than three months prior to the filing of the Statement.

3. ☐ Consideration of the following list of additional information (including any copending or abandoned U.S. application, prior uses and/or sales, etc.) is requested.


4. For each non-English language reference listed on the attached form PTO-1449, reference is made to:

- a. ☐ a full or partial English language translation submitted herewith,
 - b. ☐ a foreign patent office search report (in the English language) submitted herewith,
 - c. ☐ the concise explanation contained in the specification of the present application at page,
 - d. ☐ the concise explanation set forth in the attached English language abstract,
 - e. ☐ the concise explanation set forth below or on a separate sheet attached to the reference:
5. ☒ A foreign patent office search report citing one or more of the references is enclosed, along with an English translation of the International Preliminary Examination Report.

Respectfully submitted,

Fuminori SATO et al.

By



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August 15, 2001

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Sheet 1 of 2

FORM PTO 1449 (modified)

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

LIST OF REFERENCES CITED BY APPLICANT(S)
(Use several sheets if necessary)

Date Submitted to PTO: August 15, 2001

ATTY DOCKET NO.
2001_1141A

SERIAL N
NEW

APPLICANT
Fuminori SATO et al.

FILING DATE
August 15, 2001

GROUP

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	AA						
	AB						
	AC						
	AD						

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
	AE	96/31214	10/1996	WO			
	AF						

OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)

AG	M.R. Angelastro et al., "Inhibition of Human Neutrophil Elastase with Peptidyl Electrophilic Ketones. 2. Orally Active PG-Val-Pro-Val Pentafluoroethyl Ketones", J. Med. Chem., (1994), Vol. 37, No. 26, pp. 4538-4553.
AH	P.D. Edwards et al., "Discovery and Biological Activity of Orally Active Peptidyl Trifluoromethyl Ketone Inhibitors of Human Neutrophil Elastase", J. Med. Chem., (1997), Vol. 40, No. 12, pp. 1876-1885.
AI	Chemical Abstracts, Vol. 62, No. 8, (1965) Columbus, Ohio, US; Abstract No. 9129d, G. Kuehn et al., "Ion Exchangers with Complex-Forming Anchor Groups. XII. Existence of Ethylenediaminetriacetic Acid", Z. Chem., 4(12), 1964, pp. 462-463, Reg. No. 730-24-5.
AJ	Chemical Abstracts, Vol. 64, No. 5, (1966) Columbus, Ohio, US; Abstract No. 6768h, M. Sumoto et al., "Synthesis of some Polyamides and Polyureas Containing the Piperazine Ring", Kogyo Kagaku Zasshi, 68(10), 1965, pp. 1989-1994, Reg. No. 7709-77-5.
AK	Chemical Abstracts, Vol. 66, No. 15, (1967) Columbus, Ohio, US; Abstract No. 65420u, T.L. Patton et al., "Reactions of Isocyanates with Cyanohydrins. Synthesis of 2,4-oxozolidinediones and 1,3-disubstituted Parabanic Acids", J. Org. Chem., 32(2), 1967, pp. 383-388, Reg. No. 10319-59-2.

EXAMINER

DATE CONSIDERED

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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Sheet 2 of 2

FORM PTO 1449 (modified) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE LIST OF REFERENCES CITED BY APPLICANT(S) (Use several sheets if necessary) Date Submitted to PTO: August 15, 2001		ATTY DOCKET NO. 2001_1141A SERIAL NO. NEW APPLICANT Fuminori SATO et al. FILING DATE August 15, 2001 GROUP	
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U.S. PATENT DOCUMENTS							
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	AA						
	AB						
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	AD						

FOREIGN PATENT DOCUMENTS							
	AE	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
	AE						
	AF						

OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)	
	AG Chemical Abstracts, Vol. 97, No. 7, (1982) Columbus, Ohio, US; Abstract No. 55774p, S. Hashimoto et al., "Formation of 1,4-disubstituted Piperazines by Thermal Degradation of Poly(1-substituted Aziridines). I", Sci. Eng. Rev. Doshisha Univ., 22 (4), pp. 212-222., Reg. No. 82345-80-0.
	AH S. Takano et al., "Analysis of Cationic and Amphoteric Surfactants: V. Structure Analysis of the Amphoteric Surfactants obtained by the reaction of 1-(2-hydroxyethyl)-2-alkyl-2-imidazoline with sodium monochloroacetate", J. Am. Oil Chem. Soc. (1983), Vol. 60, No. 10, pp. 1807-1815, Reg. No. 88245-89-0.
	AI Chemical Abstracts, Vol. 114, No. 9, (1991), Columbus, Ohio, US; Abstract No. 81701b, Z. S. Arnold et al., "Hydantoin-1,3-diacetic acid and its derivative", Pol. J. Chem., 64 (1-6), 1990, pp. 333-338, Reg. No. 132065-89-5.
	AJ C. W. Grote et al., "Stereocontrolled Synthesis of DTPA Analogues Branched in the Ethylene Unit", J. Org. Chem., (1995), Vol. 60, No. 21, pp. 6987-6997, Reg. No. 171557-30-5.
	AK Chemical Abstracts, Vol. 127, No. 293606 (1997), Columbus, Ohio, US; Abstract No. 293606t, A. R. Tapia-Benavides et al., "Syntheses of N-substituted 2,5-piperazinediones", Heterocycles, 45(9), 1997, pp. 1679-1686, Reg. No. 196871-40-6.

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